

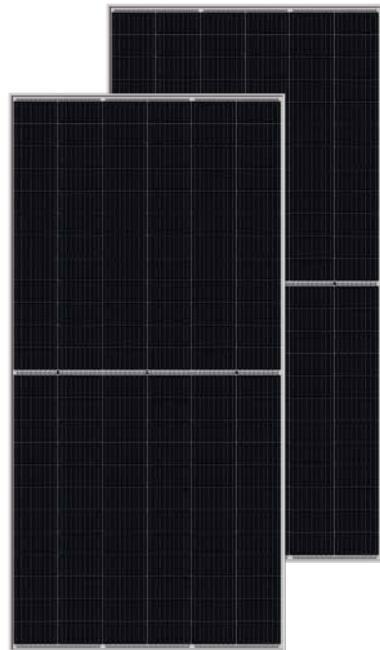
# BIPRO

TD6G72M **144-cell**

390 - 410W

bifacial dual glass

9BB half-cut mono perc



## KEY FEATURES



### 9BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss



### Industry leading high yield

Bifacial PERC cell technology,  
5%-25% more yield depends on different conditions



### Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



### Wider application

No water-permeability and high wear-resistance,  
can be widely used in high-humid, windy and dusty area



### IP68 junction box

High waterproof level

## SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems

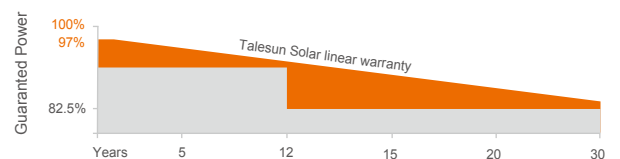


## PERFORMANCE WARRANTY



Linear Performance Warranty

Standard Performance Warranty



## ELECTRICAL PARAMETERS

### Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	390	395	400	405	410
Operating Voltage (Vmpp/V)	40.2	40.5	40.8	41.1	41.4
Operating Current (Impp/A)	9.71	9.76	9.81	9.86	9.91
Open-Circuit Voltage (Voc/V)	48.5	48.7	48.9	49.1	49.3
Short-Circuit Current (Isc/A)	10.25	10.29	10.33	10.37	10.41
Module Efficiency $\eta$ (%)	19.0	19.2	19.5	19.7	20.0

### Performance at NMOT

Maximum Power (Pmax/W)	290	294	298	301	305
Operating Voltage (Vmpp/V)	38.0	38.3	38.6	38.8	39.1
Operating Current (Impp/A)	7.64	7.68	7.72	7.77	7.82
Open-Circuit Voltage (Voc/V)	45.7	45.9	46.1	46.3	46.4
Short-Circuit Current (Isc/A)	8.25	8.28	8.35	8.35	8.38

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

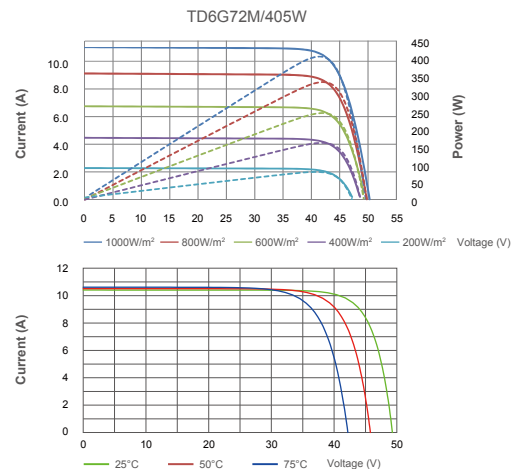
### Electrical characteristics with different rear side power gain (refer to 400W front)

Pmax gain	Pmax/W	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	420	40.8	10.30	48.9	10.84
10%	440	40.8	10.79	48.9	11.36
15%	460	40.8	11.28	48.9	11.87
20%	480	40.8	11.77	48.9	12.39
25%	500	40.8	12.26	48.9	12.91

## MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	158.75*158.75mm
Cell Arrangement	144 (6*24)
Weight	26.8kg (59.08lbs)
Module Dimensions	2031*1011*30mm (79.96*39.8*1.18inches)
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm <sup>2</sup> (0.006inches <sup>2</sup> )/UL: 12AWG
Front Glass	2.0mm (0.08 inches) AR Coating Semi-tempered Glass
Back Glass	2.0mm (0.08 inches) Glazed Semi-tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	35pcs/carton, 770pcs/40hq
Packing Configuration (for USA)	32pcs/carton, 672pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

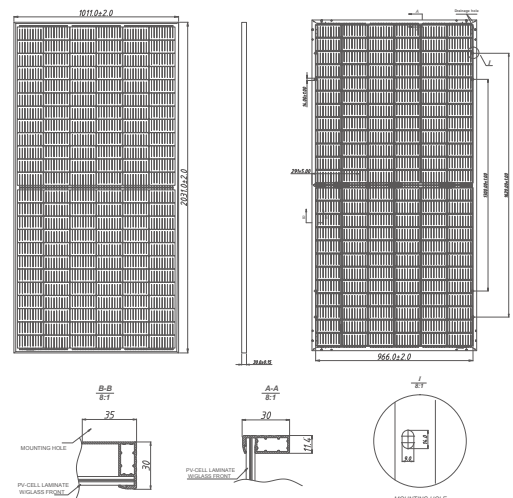
## I-V CURVE



## OPERATING CONDITIONS

Maximum System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2
Backside Output Ratio*	70%+(+5% ~ -10%)
*Under STC: Backside Output Ratio = $P_{\max(\text{rear})} / P_{\max(\text{front})}$	

## TECHNICAL DRAWINGS



## TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C